Hibernate Built-in Types

Hibernate includes a rich and powerful range of built-in types. These types satisfy most needs of a typical application, providing a bridge between basic Java types and common SQL types. Java types mapped with these types range from basic, simple types, such as long and int, to large and complex types, such as Blob and Clob. The following table categorizes Hibernate built-in types with corresponding Java and SQL types. Although the SQL types specified in the table above are standard SQL types, your database may support somewhat different SQL types. Refer to your database documentation to find out which types you may use instead of the standard SQL types shown in the table.

Don't worry about the SQL types that your database supports. The SQL dialect and JDBC driver are always responsible for transforming the Java type values to appropriate SQL type representations. The type attribute specifies Hibernate types in mapping definitions. This helps Hibernate to create an appropriate SQL statement when the class property is stored, updated, or retrieved from its respective column.

Java Type	Hibernate Type Name	SQL Type
Primitives		
Boolean or boolean	boolean	BIT
	true_false	CHAR(1)('T'or'F')
	yes_no	CHAR(1)('Y'or'N')
Byte or byte	byte	TINYINT
char or Character	character	CHAR
double or Double	double	DOUBLE
float or float	float	FLOAT
int or Integer	integer	INTEGER
long or Long	long	BIGINT
short or Short	short	SMALLINT
String		
java.lang.String	string	VARCHAR
	character	CHAR(1)
	text	CLOB
Arbitrary Precision Numeric		
java.math.BigDecimal	big_decimal	NUMERIC
Byte Array		
byte[] or Byte[]	binary	VARBINARY

Time and Date		
java.util.Date	date	DATE
	time	TIME
	timestamp	TIMESTAMP
java.util.Calendar	calendar	TIMESTAMP
	calendar_date	DATE
java.sql.Date	date	DATE
java.sql.Time	time	TIME
java.sql.Timestamp	timestamp	TIMESTAMP
Localization		
java.util.Locale	locale	VARCHAR
java.util.TimeZone	timezone	
java.util.Currency	currency	
Class Names		
java.lang.Class	class	VARCHAR
Any Serializable Object		
java.io.Serializable	Serializable	VARBINARY
JDBC Large Objects		
java.sql.Blob	blob	BLOB
java.sql.Clob	clob	CLOB